WE CLAIM:

1. A physiological data recording apparatus comprised of:

   (a) a pocket computer with display on the front,

   (b) one or more sensors mounted on the back of said pocket computer,

   (c) means to physically connect said sensors and said pocket computer,

   (d) means for physiological signal amplification, filtering, and transmission from said sensors to said pocket computer,

   whereby said apparatus can be single handedly pressed by an operator against patient's body in such a manner that sensors are in contact with patient's body and visual display is directed toward the operator.

2. The apparatus of claim 1 wherein said sensors and said pocket computer are physically connected reversibly or irreversibly.
3. The apparatus of claim 1 wherein the electrical signal from said sensors is transmitted to said pocket computer via a wire or wirelessly.
4. The sensors of claim 1 are selected from a group consisting of electroconductive sensors such as EKG sensors, acoustic sensors, optical sensors, infrared sensors, radiofrequency sensors, and other physiological sensors.
5. The pocket computer of claim 1 is selected from a group consisting of a Personal Digital Assistant (PDA), a Windows Pocket PC, a Palm handheld computer, a notebook PC, a tablet PC, a mobile phone, and any other pocket computer.
6. The apparatus of claim 1 incorporating means for visualization of EKG, audio, and other physiological signal waveforms on the computer screen of claim 1.

7. The apparatus of claim 1 incorporating means for automatic identification and marking phases of respiratory cycle, automatic identification and marking events on EKG, and automatic identification and marking heart and lung sounds components.
8. The apparatus of claim 1 having means for automated intrathoracic localization of normal and abnormal lung and heart sounds and visualization of sound sources on the computer display.
9. The pocket computer of claim 1 transmitting data to a secondary computing device, such as a server either via wire or wirelessly.